

IN THE CLAIMS

Please amend the claims as follows:

1. (Previously amended) Method for error correction of an encoded data stream including the steps of:

- saving the demodulated data stream in an input buffer;
- performing a first correction process on-the-fly in the input buffer;
- transferring the data to an external DRAM after correction;
- copying the data from the external DRAM to an embedded SRAM;
- starting a multipass correction in the embedded SRAM; and
- copying the corrected data back from the embedded SRAM to the external DRAM

after the multipass correction.

2. (Previously amended) Method according to claim 1, wherein streaming discontinuities of less than one row are corrected immediately in the input buffer while streaming discontinuities of one row or more are corrected in the external DRAM.

3. (Previously amended) Method according to claim 1, further including the step of using the external DRAM for deinterleaving.

4. (Previously amended) Method according to claim 1, wherein the data stream includes data frames consisting of data rows and columns including horizontal and vertical parity data for correcting errors in the data frame.

5. (Previously amended) Method according to claim 1, wherein the size of the input buffer is at least twice the number of bytes per row of the data frame.

6. (Previously amended) Method according to claim 1, wherein the input buffer is an SRAM.

7. (Previously amended) Method according to claim 1, further including the step of storing status bits in a status memory, the status bits indicating if a row of the data frame is correct or not.

8. (Previously amended) Device for error correction of an encoded data stream, including:

- an input buffer for saving the demodulated data stream and performing a first correction process on-the-fly;
- an external DRAM to which the data are transferred after correction;
- an embedded SRAM for performing a multipass correction on the corrected data;
- means for copying the data frame from the external DRAM to the embedded SRAM;

and

- means for copying the corrected data back from the embedded SRAM to the external DRAM after the multipass correction.

9. (Previously amended) Device according to claim 8, further including a deinterleaver for deinterleaving and/or for correcting streaming discontinuities in the external DRAM.

10. (Currently Amended) Apparatus for reading from ~~and/or~~ a recording media ~~and~~ writing to a recording media, wherein ~~it has~~ said apparatus includes means ~~to perform~~ uses for performing a method according to claim 1.